

MONTHLY AIR QUALITY REPORT FOR MARCH 2004

AOI COLOR SCALE

| | | | |
|--------------------------------|--------------------------------------|---|--|
| GOOD 0-50 | MODERATE 51-100 | UNHEALTHY FOR SENSITIVE GROUPS 101-150 | UNHEALTHY 151-200 |
|--------------------------------|--------------------------------------|---|--|

Calendar of maximum AQI values & their corresponding color for March 2004*

*Preliminary data

SAMPLE POLLUTANT REPORTING BOX

| | | |
|---------------------------------|-------------|--------------|
| 1 (day of month) | O3 | CO |
| | PM10 | PM2.5 |

| | SUN | | MON | | TUES | | WED | | THU | | FRI | | SAT |
|----|-----------------|----|----------------|----|----------------|----|----------------|----|-----------------|----|-----------------|----|-----------------|
| | | 1 | 35 18 32 38 | 2 | 38 18 31 33 | 3 | 31 10 13 39 | 4 | 33 13 13 n/a | 5 | 39 14 17 n/a | 6 | 41 18 26 n/a |
| 7 | 37 26 28 n/a | 8 | 38 30 55 33 | 9 | 41 33 58 33 | 10 | 44 26 68 46 | 11 | 41 27 51 45 | 12 | 41 11 21 37 | 13 | 41 13 16 19 |
| 14 | 48 17 28 28 | 15 | 45 23 55 28 | 16 | 45 27 59 32 | 17 | 45 27 59 30 | 18 | 50 28 56 30 | 19 | 64 34 58 31 | 20 | 54 34 52 37 |
| 21 | 38 39 64 39 | 22 | 38 10 49 34 | 23 | 40 24 51 27 | 24 | 34 26 51 28 | 25 | 34 17 47 31 | 26 | 41 19 56 33 | 27 | 44 13 42 25 |
| 28 | 45 17 50 22 | 29 | 47 20 54 28 | 30 | 47 18 51 34 | 31 | 44 17 55 40 | | | | | | |
| | | | | | | | | | | | | | |

Exceedance days during MAR 2004-

Total= 0 Date Max AQI Pollutant Site/s

Health Watches issued during MAR 2004-

Total= 0 Date Max AQI Pollutant Site/s

High Pollution Advisories issued during MAR 2004-

Total= 0 Date Max AQI Pollutant Site/s

| | | |
|-----------------------------|---|----|
| <u>Concentration Recap:</u> | Days in the Good category: | 14 |
| | Days in the Moderate category: | 17 |
| | Days in the Unhealthy for Sensitive Groups category: | 0 |
| | Days in the Unhealthy category: | 0 |
| | Total Forecast Days: | 31 |

Narrative:

A wide variety of weather conditions occurred during the month – not atypical for March amid the change of season. Rain, fog, thunderstorms, hail, wind gusts near 50 mph, and record high max and min temperatures were all recorded. In addition, March 2004 was the warmest March on record with 22 days of maximum temperatures 85 degrees or higher.

Most of the above largely prevented any long-term air mass stagnation and this in turn helped keep maximum concentrations of carbon monoxide and fine particles in the good range every day. High humidity prevented accurate PM-2.5 readings from the 4th through the 7th.

Peak ozone concentrations reached the moderate range on the 19th and 20th as maximum daytime temperatures rose into the 90's. Although temperatures were actually warmer on the 21st and 22nd, ozone levels dropped dramatically due to breezy easterly winds. This illustrates that even early in the year under the right conditions – high temperatures and light winds – ozone production can increase substantially. The official start of the “ozone season” begins on April 1 and an expanded section dedicated to ozone will be included in the monthly reports thru September.

As the graphs below indicate the widest variation in concentrations was in coarse particles (PM-10) which ranged from a low AQI value of 13 on the 3rd and 4th to a high value of 68 on the 10th. The low values were during a rain event that dropped over an inch of precipitation. A strong warming trend then occurred as maximum temperatures rose from 58 degrees on the 4th to 90 degrees on the 8th. It appears that this warming, along with 100% of the possible sunshine from the 6th thru the 8th and winds in the 20-25 mph range on the 7th and the 8th, quickly dried out the soil surface and allowed fugitive dust emissions to resume at or near at least one monitoring site. PM-10 levels dropped sharply from the 12th thru the 14th as another weather system produced more rain, and then rebounded just as quickly as dry and very warm weather returned. -Reith



